**PERFORMANCE MEASUREMENT AND ANALYSIS FOR TRANSFORMER USING LabVIEW**

**ABSTRACT**

The proposed project aims to the performance measurement and analysis for a single phase transformer using LabVIEW. In existing system, for measuring the voltage, current and other characteristics of transformer digital clamp meter, digital hand held scope meters are used. For analysis, oscilloscope, digital voltmeter, time current curve methods are used. To measure and handle all these equipments, human power is required and moreover there is more chance for human error that occurs and therefore the process becomes inefficient and also consumes lot of time. To overcome such problems in existing method the proposed method is introduced. LabVIEW is an integrated development environment designed specifically for engineers and scientist building measurement and control system. LabVIEW is used to analyse the performance of single phase transformer. NI USB DAQ-6009 is used interface hardware with LabVIEW. By sensing the voltage, current, performance and characteristics will be measured and analyzed. This proposed method is completely based on online measurement and continuous monitoring. This helps to improve the system performance and quality. Moreover it gives exact values and it reduces computation difficulties while calculating its required parameters. The graphical view of the machine’s performance can be obtained using LabVIEW. With a help of graphical programming it is easy to visualize. Hence software tool is used widely in measurement technique and also helps in analysis of various signals. The parameters such as Efficiency, %Regulation, Iron loss, Copper loss of the transformer are being measured.

**Keywords:** Measurement, Transformer, Voltage, Current, DAQ.

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